



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/674,464	10/01/2003	Benjamin Chu	239709US23	5537
22850	7590	01/15/2009		
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER TENTON, LEO B	
			ART UNIT 1791	PAPER NUMBER
			NOTIFICATION DATE 01/15/2009	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com
oblonpat@oblon.com
jgardner@oblon.com

Office Action Summary

Application No.

10/674,464

Applicant(s)

CHU ET AL.

Examiner

Leo B. Tentoni

Art Unit

1791

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 November 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 and 18-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 and 18-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S508)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 17 November 2008 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the

examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1-14 and 18-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al (U.S. Patent Application Publication 2005/0067732 A1) in combination with Gravett et al (U.S. Patent Application Publication 2004/0146546 A1).

Kim et al (see the entire document, in particular, paragraphs [0006], [0017], and [0020]) teaches a process of making nanofibers by electroblowing as claimed, except that Kim et al does not explicitly teach making fibers from hyaluronan polymer, which is taught by Gravett et al (see the entire document, in particular, paragraphs [0021], [0083], [0087], [0098], [0099], [0102], [0103] and [0116]) and such would have been obvious to one of ordinary skill in the art at the time the invention was made in the process of Kim et al in view of Gravett et al principally in order to manufacture a desired product (e.g., fibers) from hyaluronan polymer.

Response to Arguments

5. Applicant's arguments filed on 17 November 2008 have been fully considered but they are not persuasive.

6. Applicant argues (page 8) that Gravett et al does not address the spinning of nanofibers, but instead of normal denier fibers. Examiner responds that Gravett et al does teach nanofibers and is not solely limited to normal denier fibers because Gravett et al teaches that the diameter of the fibers may

range in size depending on the form of the material, and Gravett et al teaches a sheet (made from fibers) having a thickness as small as about 25 microns, which suggests that the sheet is made from nanofibers (see paragraphs [0102] and [0103] of Gravett et al).

7. Applicant argues (page 8) that the examiner has failed to take into account the difficulties inherent with spinning hyaluronan into nanofibers in high throughput. Examiner responds that this argument is not commensurate in scope with the instant claims because none of the instant claims positively recite any amount (or range of amounts) of throughput.

8. Applicant argues (pages 8 and 9) that one of ordinary skill in the art would not be motivated to select hyaluronan or hyaluronan containing polymers from the listing in Gravett et al for use in the process of Kim et al. Examiner responds that one of ordinary skill in the art would be motivated to select hyaluronan or hyaluronan containing polymers as taught by Gravett et al (note that Gravett et al teaches that nanofibers of hyaluronan or hyaluronan containing polymers having appropriate dimensions may be made by standard melt-processing techniques, including electrospinning and melt-blowing (see, for example, paragraphs [0102], [0103] and [0116] of Gravett et al)) for use in the process of Kim et al in order to manufacture a desired product (e.g., fibers) from hyaluronan polymer. Furthermore, the claimed subject matter would have been obvious to one of ordinary skill in the art at the time the invention was made because the

substitution of one known material (i.e., hyaluronan, as taught by Gravett et al) for another known material (i.e., the polymers of Kim et al) would have yielded predictable results (formation of hyaluronan polymer nanofibers) to one of ordinary skill in the art at the time the invention was made (KSR International Co. v. Teleflex Inc., 550 U.S. _____, 82 USPQ2d 1385 (2007)).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leo B. Tentoni whose telephone number is (571) 272-1209. The examiner can normally be reached on Monday - Friday (6:30 A.M. - 3:00 P.M.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina A. Johnson can be reached on (571) 272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Leo B. Tentoni/
Primary Examiner, Art Unit 1791